

Corona (Covid-19) Forecast - No Lockdown Scenario

Switzerland

2020-05-18

For more details on the forecast assumptions click [here](#).

Methodology

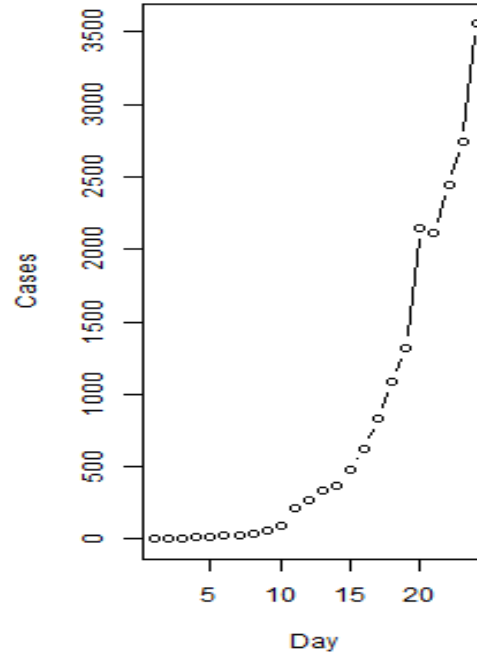
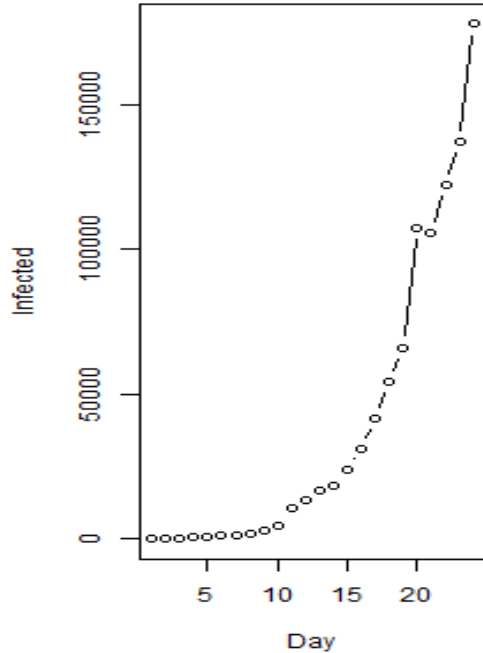
- The SIR epidemiological model is used to forecast active infections and cases. Forecast horizon is 365 days, counted from the date of the first case recorded in country.
- Only pre-lockdown data is used during model fit in order to forecast without the influence of a lockdown – the last 2 days prior to lockdown also being excluded.
- Automated pre-processing is conducted to estimate infections (and those in the infectious window) from official case data – this is informed by available sero survey data.
- Infection Fatality Rates (IFR) and Case Fatality Rates (CFR) are estimated from the latest data automatically – the denominator is adjusted for lag.

Assumptions

- High end fatality scenario: infection to case ratio of 12.5 to 1. Assumes: 50% symptomatic, of which 16% present as cases – meaning 8% of total infections present as cases (12.5 to 1).
- Low end fatality scenario: infection to case ratio of 50 to 1. Assumes: 50% symptomatic, of which 4% present as cases – meaning 2% of total infections present as cases (50 to 1).
- WARNING: Early sero-survey data used to estimate infections - however studies thus far have suffered from sampling and test kit issues. Sero-survey data may not be relevant to your country.
- The first case occurred on 26/02/2020 and lockdown occurred on 23/03/2020, 26 days later.
- For more details on the forecast assumptions click [here](#).

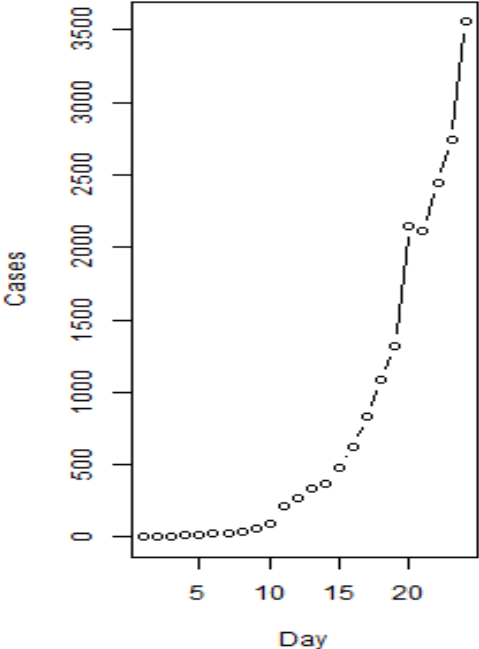
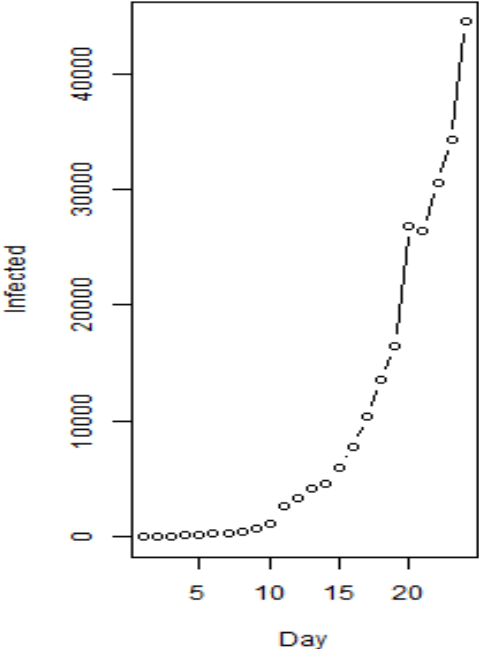
Past infections and reported cases (low end fatality)

Past infections and reported cases (lower scenario)



Past infections and reported cases (high end fatality)

Past infections and reported cases (upper scenario)

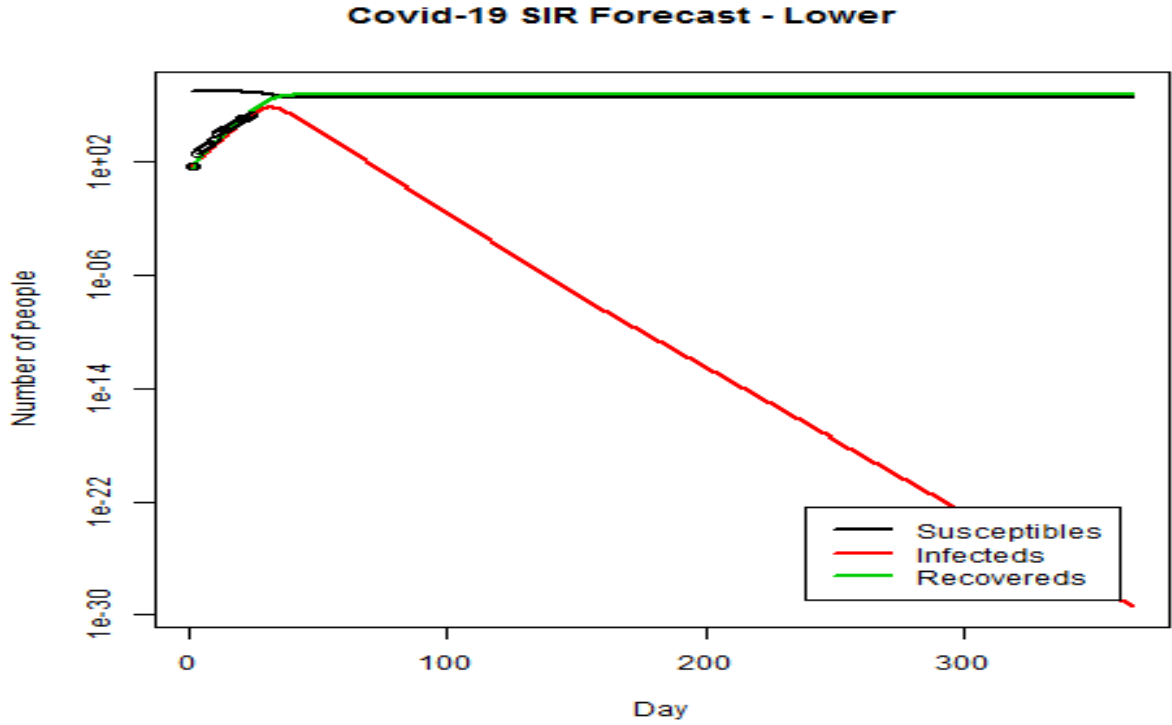


Forecast - 365 days*

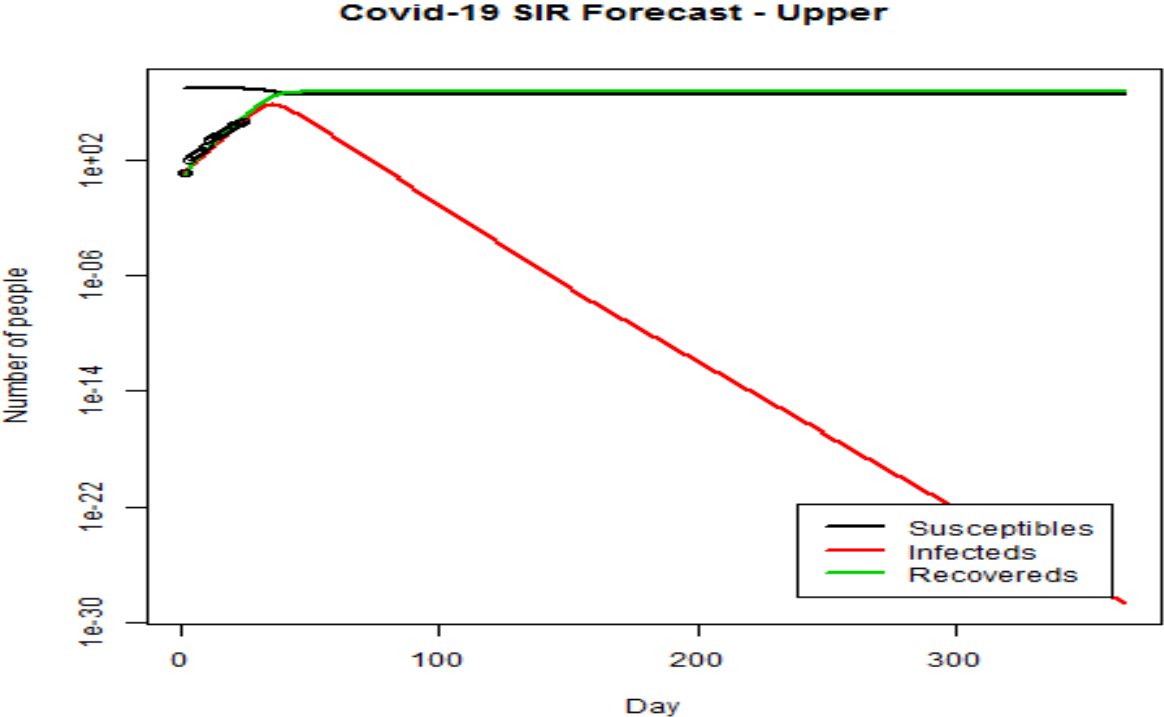
Descriptors	Lower	Upper
Total cases	17,235	67,361
Single worst day (new cases peak)	1,352	5,213
Total infections	861,743	842,009
Total fatalities	926	3,619
IFR %	0.11	0.43
CFR %	5.4	5.4
Reproduction number	1.6	1.6
Infectious window	10	10
Fit period	24	24
IC	50	12.5
Beta	1	1
Gamma	0.63	0.64

*From the date of the first case

Corona Forecast - 365 day - Lower Boundary (Log Scale)



Corona Forecast - 365 day - Upper Boundary (Log Scale)



Forecast - Active Cases - Milestones

Milestone	New
30th Day	2,692
60th Day	24
90th Day	0
120th Day	0
150th Day	0

Forecasts by country

To see forecast slide decks for other countries, click [here](#).

Disclaimer

- Use the information provided in this presentation at your own risk. Acentric Marketing Research (Pty) LTD makes no representation of warranty of any kind regarding the quality, accuracy or completeness of the information contained in this report. Acentric Marketing Research (Pty) LTD, its directors, employees and partners accept no liability whatsoever for losses or damages - whether direct or consequential - resulting from errors, inaccuracies or omissions.